

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

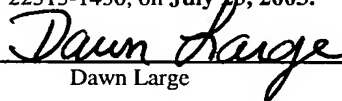
Attorney Docket No. 02,647-664

APPLICANT: Yoram Wasserman  
ART UNIT: 3736  
EXAMINER: N/A  
SERIAL: N/A  
NUMBER:  
FILED: Herewith  
FOR: A SIGNAL PROCESSING  
METHOD AND DEVICE  
FOR SIGNAL-TO-NOISE  
IMPROVEMENT

**Information Disclosure  
Statement**

**CERTIFICATE OF EXPRESS MAILING**

I hereby certify that the enclosed paper or fee is being deposited with the United States Postal Service as Express Mail, postage prepaid, in an envelope as "Express Mail Post Office to Addressee," Mailing Label No. EV 303951887US and addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 28, 2003.

  
Dawn Large

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR 1.97 AND 1.98**

**Commissioner for Patents**  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to Rule 97 and in compliance with Rule 56, Applicants submit herewith this Information Disclosure Statement. This application claims priority under 35 USC §120 to copending application serial No. 09/981,564 filed October 17, 2001. The references listed on attached Form 1449 sheets were submitted by the Applicants and/or cited by the Examiner in the prior application and, therefore, copies of the references are not being submitted.

Applicants hereby request that the Office consider them in its consideration of the above-referenced application and make them of record in the case.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 CFR 1.97(g)), an admission that the information cited is, or is

considered to be, material to patentability or that no other material information exists. The filing of this information disclosure statement shall not be construed as an admission against interest in any manner.

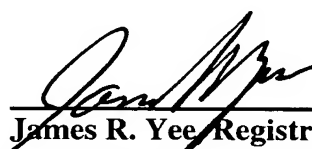
Applicants believe that no fee is due. However, should there be a fee associated with this document, please charge it to Deposit Account No. 08-2789. A duplicate of this paper is enclosed.

**Respectfully submitted,**

**HOWARD & HOWARD ATTORNEYS, P.C.**

**July 22, 2003**

**Date**

  
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The Pinehurst Office Center, Suite #101  
39400 Woodward Ave.  
Bloomfield Hills, MI 48304-5151  
(248) 723-0349

Enclosures:  
PTO-1449 w/out Cited References

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 02,647-644		SERIAL NO. 09/981,564								
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT: Wasserman et al.										
		FILING DATE October 17, 2001		GROUP: 3736								
<b>U.S. PATENT DOCUMENTS</b>												
Examiner Initial	Document No.							Date	Name	Class	Sub- Class	Filing Date
	3	6	3	8	6	4	0	02/01/72	Shaw	128	2	11/01/67
	3	7	9	9	6	7	2	03/26/74	Vurek	356	41	09/15/72
	3	8	4	7	4	8	3	11/12/74	Shaw	356	41	09/24/73
	3	9	9	8	5	5	0	12/21/76	Konishi, et al.	356	39	10/10/75
	4	0	8	6	9	1	5	05/02/78	Kofsky, et al.	128	2	05/24/76
	4	1	6	7	3	3	1	09/11/79	Nielsen	356	39	12/20/76
	4	2	6	6	5	5	4	05/12/81	Hamaguri	128	633	06/19/79
	4	3	5	7	1	0	5	11/02/82	Loretz	356	40	08/06/80
	4	4	0	7	2	9	0	10/04/83	Wilber	128	633	04/01/81
	4	4	4	6	8	7	1	05/08/84	Imura	128	633	12/15/80
<b>FOREIGN PATENT DOCUMENTS</b>												
Country	Document No.							Date	Name	Class	Sub- Class	Filing Date
WO	9	4	0	3	1	0	2	02/17/94	Parker			
WO	0	1	5	4	5	7	3	08/02/01	Boas			
WO	0	1	8	4	1	0	7	11/08/01	Benni			
<b>OTHER DOCUMENTS (Incl. Author, Title, Date, Pertinent Pages, etc.)</b>												
<b>**SEE LAST PAGE - PAGE 6**</b>												
Examiner									Date Considered			
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	4	7	1	4	3	4	1	12/22/87	Hamaguri et al.	356	41	02/21/85
	4	7	4	0	0	8	0	04/26/88	Donohue, et al.	356	326	03/21/85
	4	7	7	3	4	2	2	09/27/88	Isaacson, et al.	128	633	04/30/87
	4	7	9	6	6	3	6	01/10/89	Branstetter, et al.	128	633	09/10/87
	4	8	0	2	4	8	6	02/07/89	Goodman, et al.	128	633	06/07/85
	4	8	1	9	6	4	9	04/11/89	Rogers et al.	128	660.02	11/03/86
	4	8	1	9	7	5	2	04/11/89	Zelin	128	633	10/02/87
	4	8	5	4	6	9	9	08/08/89	Edgar, Jr.	356	41	11/02/87
	4	8	5	9	0	5	7	08/22/89	Taylor et al.	356	41	10/13/87
	4	8	6	7	5	5	7	09/19/89	Takatani et al.	356	41	04/11/88
	4	8	9	2	1	0	1	01/09/90	Cheung et al.	128	633	02/24/89
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Examiner Initial	Document No.							Date	Name	Class	Sub- Class	Filing Date
	4	9	2	8	6	9	2	05/29/90	Goodman, et al.	128	633	11/23/88
	4	9	3	4	3	7	2	06/19/90	Corenman, et al.	128	633	04/05/89
	4	9	6	0	1	2	6	10/02/90	Conlon	128	633	10/14/98
	5	1	9	0	0	3	8	03/02/93	Polson, et al.	128	633	11/01/89
	5	2	2	4	4	7	8	07/06/93	Sakai et al.	128	633	08/25/92
	5	3	4	8	0	0	4	09/20/94	Hollub	128	633	03/31/93
	5	3	4	9	5	1	9	09/20/94	Kaestle	364	413.09	11/12/93
	5	3	5	5	8	8	0	10/18/94	Thomas, et al.	128	633	07/06/92
	5	3	9	8	6	8	0	03/21/95	Polson, et al.	128	633	07/08/92
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	5	4	1	3	1	0	0	05/09/95	Barthelemy, et al	128	633	01/21/94
	5	4	2	1	3	2	9	06/06/95	Casciani, et al	128	633	04/01/94
	5	4	8	2	0	3	6	01/09/96	Diab, et al.	128	633	05/26/94
	5	4	9	0	5	0	5	02/13/96	Diab, et al.	128	633	10/06/93
	5	4	9	0	5	0	6	02/13/96	Takatani, et al.	128	633	03/28/94
	5	5	1	7	9	8	8	05/21/96	Gerhard	128	633	09/19/94
	5	5	3	3	5	0	7	07/09/96	Potratz	128	633	04/08/94
	5	6	3	2	2	7	2	05/27/97	Diab, et al.	128	633	10/07/94
	5	6	4	5	0	6	0	07/08/97	Yorkey	128	633	06/14/95
	5	6	8	5	2	9	9	11/11/97	Diab, et al.	128	630	12/14/95
	5	7	5	8	6	4	4	06/02/98	Diab, et al.	128	633	06/07/95
	5	7	6	9	7	8	5	06/23/98	Diab, et al.	600	364	07/07/95
	5	7	8	2	2	3	7	07/21/98	Casciani, et al.	128	633	03/30/95
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	5	8	2	3	9	5	0	10/20/98	Diab, et al.	600	310	11/12/96
	5	8	4	2	9	8	1	12/01/98	Larsen, et al.	600	323	07/17/96
	5	8	5	3	3	6	4	12/29/98	Baker Jr., et al.	600	500	06/07/96
	5	9	1	9	1	3	4	07/06/99	Diab	600	323	01/12/98
	5	9	9	5	8	5	6	11/30/99	Mannheimer, et al.	600	322	11/22/95
	6	0	1	1	9	8	6	01/04/00	Diab, et al.	600	323	02/02/98
	6	0	3	1	6	0	3	02/29/00	Fine, et al.	356	41	06/06/96
	6	0	3	6	6	4	2	03/14/00	Diab, et al.	600	364	06/22/98
	6	0	6	7	4	6	2	05/23/00	Diab, et al.	600	310	05/19/98
	6	0	8	1	7	3	5	06/27/00	Diab, et al.	600	310	07/03/97
	6	0	8	3	1	7	2	07/04/00	Baker, Jr., et al.	600	500	08/20/98
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	<b>OTHER DOCUMENTS (Incl. Author, Title, Date, Pertinent Pages, etc.)</b>	
	<i>"Reflectance Pulse Oximetry at the Forehead of Newborns: The Influence of Varying Pressure on the Probe"; A. Carin M. Dassel, MD, et al.; Dept. of Obstetrics and Gynecology, Univ. Hospital Groningen, Groningen; Journal of Clinical Monitoring 12: Pgs. 421-428, 1996.</i>	
	<i>"Reflectance Pulse Oximetry - Principles and Obstetric Application in the Zurich System"; Voker Konig, Renate Huch, and Albert Huch; Perinatal Physiology Research Dept., Dept. of Obstetrics, Zurich Univ. Hospital, CH-8091 Zurich, Switzerland; Journal of Clinical Monitoring and Computing 14: Pgs. 403-412, 1998.</i>	
	<i>"Effect of location of the sensor on reflectance pulse oximetry"; A.C. M. Dassel, Research Fellow et al.; British Journal of Obstetrics and Gynecology; August 1997, Vol. 104, pp. 910-916.</i>	
	<i>"Design and Evaluation of a New Reflectance Pulse Oximeter Sensor"; Y. Wasserman et al., PhD, et al.; Worcester Polytechnic Institute, Biomedical Engineering Program, Worcester, MA 01609; Association for the Advancement of Medical Instrumentation, Vol. 22, No. 4, 1988; Pgs. 167-173.</i>	
	<i>"Skin Reflectance Pulse Oximetry: In Vivo Measurements from the Forearm and Calf"; Y. Wasserman et al., PhD and M.J. McGinn, MSc; Dept. of Biomedical Engineering, Worcester Polytechnic Institute, Worcester, MA 01609; Journal of Clinical Monitoring, Vol. 7, No. 1, 1991; Pgs. 7-12.</i>	
	<i>"Experimental and Clinical Evaluation of a Noninvasive Reflectance Pulse Oximeter Sensor"; Setsuo Takatani, PhD, et al.; Dept. of Surgery, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030; Journal of Clinical Monitoring, Vol. 8, No. 4, October 1992; Pgs. 257-266.</i>	
	<i>"Wavelength Selection for Low-Saturation Pulse Oximetry"; Paul D. Mannheimer, et al.; IEEE Transactions on Biomedical Engineering, Vol. 44, No. 3, March 1997; Pgs. 148-158.</i>	
	<i>"Noninvasive Pulse Oximetry Utilizing Skin Reflectance Photoplethysmography"; Yitzhak Wasserman et al. and Burt D. Ochs; IEEE Transactions on Biomedical Engineering, Vol. 35, No. 10, October 1988; Pgs. 798-805.</i>	
	<i>"Physio-optical considerations in the design of fetal pulse oximetry sensors"; P.D. Mannheimer, M.E. Fein and J.R. Casciani; European Journal of Obstetrics &amp; Gynecology and Reproductive Biology 72 Suppl. 1 (1997) S9-S19.</i>	
	<i>"Fetal pulse oximetry: influence of tissue blood content and hemoglobin concentration in a new in-vitro model"; Thomas Edrich, Gerhard Rall, Reinhold Knitza; European Journal of Obstetrics &amp; Gynecology and Reproductive Biology 72 Suppl. 1 (1997) S29-S34..</i>	
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**Notice of References Cited**

Application/Control No.

09/981,564

Applicant(s)/Patent Under  
Reexamination  
WASSERMAN, YORAM

Examiner

David J. McCrosky

Art Unit

3736

Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,216,598	06-1993	Branstetter et al.	600/330
	B	US-5,797,840	08-1998	Akselrod et al.	600/301
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
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**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
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	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
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